

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in this application.

Listing of Claims:

1. (Previously Presented) Method for controlling a direct current motor in one or several fan units, each comprising a fan, which method comprises:
generation of a control signal from a first control unit which is external in relation to the said fan unit;
transmission of the said control signal to the said fan unit;
reception of the transmitted control signal in the said fan unit;
interpretation of the said control signal in a second control unit which is arranged in association with the said fan unit; and
generation, in the said second control unit; of a supply signal for the said direct current motor, on the basis of the control signal generated by the first control unit and received in the fan unit and on the basis of a supply voltage; wherein the method further comprises:
transmission of the control signal together with the supply voltage over a shared communication link, with the control signal being superposed on the supply voltage.
2. (Cancelled).
3. (Previously Presented) Method according to claim 1, wherein the said control signal is a binary data signal.
4. (Previously Presented) Method according to claim 3, wherein the said control signal constitutes a measurement of a certain required proportion of the maximal output of the said direct current motor or a certain required speed of rotation of the direct current motor's fan.
5. (Previously Presented) Method according to claim 1, wherein the said fan unit is used for ventilation of a vehicle seat.

6. (Cancelled).
7. (Cancelled).
8. (Cancelled).
9. (Previously Presented) Method according to claim 1, wherein information is communicated from the fan unit to the first control unit.
10. (Previously Presented) Method according to claim 9, wherein the said information is communicated via the windings of the direct current motor comprised in the fan unit, and wherein the method comprises generation of current pulses in a predetermined pattern in the windings of the direct current motor, which pattern corresponds to certain information.
11. (Cancelled).
12. (Previously Presented) Method according claim to 9, wherein the said information comprises data relating to operating state, fault diagnosis or identification information relating to the fan unit.
13. (Previously Presented) Method according to claim 1, wherein each fan unit is provided with an identity to make it possible to transmit information between the first control unit and one of several fan units.
14. (Previously Presented) Method according to claim 13, wherein it comprises coding of the said control signal in a way such that it reflects information about the said identity.
15. (Previously Presented) Method according to claim 1, wherein the first control unit regulates both the fan unit(s) and the heating element(s).

16. (Previously Presented) Arrangement for controlling a direct current motor in a fan unit, which arrangement comprises:
a first control unit that is external in relation to the said fan unit;
a communication link between the said first control unit and the said fan unit;
a second control unit arranged in association with the said fan unit and arranged to generate a supply signal for the said direct current motor on the basis of a control signal generated by the first control unit and transmitted via the said communication link and on the basis of a supply voltage;
wherein the communication link is arranged to transmit the supply voltage together with the said control signal.
17. (Cancelled).
18. (Previously Presented) Arrangement according to claim 16, wherein the said control signal is a binary data signal.
19. (Previously Presented) Arrangement according to claim 16, wherein the said fan unit is arranged for ventilation of vehicle seats.
20. (Previously Presented) Arrangement according to claim 16, wherein the said fan unit also comprises means for detecting speed of rotation.
21. (Cancelled).
22. (Previously Presented) Arrangement according to claim 16, wherein the said second control unit is arranged internally in relation to the said fan unit.
23. (Previously Presented) Arrangement according to claim 16, wherein it comprises at least two fan units that are connected either in series or in parallel.

24. (Previously Presented) Arrangement according to claim 16, wherein it comprises a circuit with a diode and a capacitor that are utilized when supplying the said control signal to the direct current motor while the supply voltage to the direct current motor is maintained.
25. (Cancelled).
26. (Currently Amended) Method according to claim [[25]]1, wherein pulse width modulation is used for ~~the said control~~ controlling of the direct current motor, and wherein the pulse frequency of the said pulse width ~~modulated~~ modulation ~~supply~~ is varied in response to the detected speed of rotation.
27. (Cancelled).
28. (Currently Amended) Method according to claim [[25]]1, wherein the second control unit generates a ~~an additional~~ pulse width modulated signal ~~intended~~ for supplying the windings of the direct current motor.
29. (Previously Presented) Method according to claim 28, wherein the said additional pulse width modulated signal is variable.
30. (Cancelled).
31. (Cancelled).
32. (Cancelled).
33. (Cancelled).
34. (Previously Presented) Vehicle seat wherein it is equipped with an arrangement according to claim 16.

35. (Cancelled).

36. (Currently Amended) Method according to claim ~~[[35]]~~ 39, wherein the said diagnostics signal is transmitted in the form of a predetermined pattern in the current that is supplied to the windings of the said direct current motor.

37. (Cancelled).

38. (New) Arrangement according to claim 16, wherein the said fan unit is arranged for control of speed of rotation of the direct current motor by means of pulse width modulation.

39. (New) Method for diagnosis and control of a direct current motor in a fan unit with a fan, the method comprising:

generating a diagnostics signal from a control unit arranged in association with the direct current motor for controlling the speed of rotation or output of the direct current motor with, a supply signal for the direct current motor being received in the control unit; and

transmitting the diagnostic signal to an additional control unit which is external in relation to the fan unit.

Support for Amendment

In view of the above amendment to the claims, claims 25, 30, and 35 are cancelled.

In view of the cancellation of claim 25, claims 26 and 28 are amended so that they depend on claim 1. In addition, claims 26 and 28 are amended to correct antecedent.

Previously cancelled claim 21 has been reintroduced as claim 38.

Cancelled claim 35 has been rewritten as new claim 39. In addition, claim 36 is amended to depend on claim 39.

No new matter or new issues are introduced by this amendment. Accordingly, entry of this amendment is requested. Upon entry, claims 1, 3-5, 9, 10, 12-16, 18-20, 22-24, 26, 28, 29, 34-36, 38 and 39 are active in this application.